REMARKS

Claims 34, 36 and 44-52 have been cancelled and new Claims 62 and 63 have been added by this response. Claims 29-33, 35, 37-43 and 53-55 have been amended. Therefore, Claims 29-33, 35, 37-43 and 53-63 are now present in the application.

The rejections to Claims 34, 36 and 44-52, as well as the Office's comments set forth at paragraph 2 of the office action, have been mooted by the cancellation of these claims.

Rejection Under 35 USC §112

The specification and Claims 29-33, 35, 37-43 and 53-55 stand rejected under 35 USC 112, first paragraph, as failing to provide an enabling disclosure. These rejections are respectfully traversed.

The following asserted deficiencies in the specification have been indicated by the Office in the office action:

1.   Essential material has not been provided by incorporation by reference to U.S. patents and by submission of software program in order for the functionally disclosed control unit 14 and microprocessor 142 to have the claimed capabilities and features set forth in Claims 32, 49 and 57 (automatic termination of the programming mode after pre-established time delay), and Claims 38-43 (the system is responsive to both an N bit and an M bit code, where N need not equal M).

2.   Essential software is absent from the specification to provide the basis for the claimed function features of Claims 29(iii), 30-33, 35, 38 (M bit, N bit functions), 40-43 (microprocessor operation and means), 53 (programming mode and receiving mode function), 54 (arming/disarming function); 55-60.

These asserted deficiencies are addressed below.

Arming/Disarming Functions.

The provision of arming and disarming functions in a vehicle security system are well known in the art. For example, see U.S. Patents 4,383,242 (employing discrete logic controller) and 4,754,255 (employing microprocessor controller). Each of these patents describe vehicle security systems which use remote portable transmitters to place the system in an armed mode or to place the system in the disarmed mode. Each also discloses vehicle anti-theft means, including noise-making devices and circuitry for disabling the vehicle ignition system. (See page 5, second paragraph of the specification.) Typically the transmitter signal toggles the system from its existing mode to the other mode, e.g., from the disarmed mode to the disarmed mode or vice versa. Therefore, in view of the state of the art which existed prior to the filing of this application, the specification enables one skilled in the art to make and use a vehicle security system with vehicle antitheft means which may be armed or disarmed.

With regard to certain of the office's comments in paragraph 17 of the Office Action, FIG. 1 shows the general functions carried out by the control unit 14. One function is the "responsive action function"; this function includes the arming/disarming of the system. Therefore the claimed means for arming/disarming is supported in the figures.

Programming Mode and Receiving Mode Functions.

The system described in U.S. Patent 4,754,255 includes a program mode operation, see Column 8, lines 12-39. U.S. Patent 4,383,242 can also be operated in a mode for modifying one or more aspects of the system operation (column 2, lines 9-45). Moreover, each system

of these patents can be operated in a receiving mode wherein the control unit is responsive to received signature code signals to arm or disarm the system. Therefore, the specification enables one skilled in the art to make and use a vehicle security system having a program mode and a receiving mode without undue experimentation.

Automatic Termination of Program Mode. (Claims 32, 49 and 57)

It is submitted that given the teachings of the specification that the microprocessor be programmed to terminate the program mode automatically after a predetermined delay after the last receipt of a transmitted encoded signal during the program mode, as set forth at page 13, line 4-8 and at page 37, lines 2-5, and given that use of microprocessor controllers is well known in the vehicle security system art, the specification enables those skilled in the art to readily make and use the claimed invention without undue experimentation.

M. and N-bit Digital Transmitter Codes.

It is well known in the vehicle security system art to use digital codes of a given bit length to arm or disarm the system. The use of different transmitters each generating different encoded signals to operate the security system is disclosed in the specification, for example, in FIG. 2, and described at the paragraph bridging pages 3 and 4, at page 39, first paragraph to page 42, first paragraph and at page 42, first paragraph. Therefore, given the specific teachings of the specification regarding the receipt of an M bit and an N bit code in order to arm or disarm the system, one skilled in the art would be able to make and use the claimed invention without undue experimentation.

Programming Means for Automatically Storing Codes.
(Claim 29(iii)).

The feature of automatically programming received codes is described in the application, e.g., at page 12, first paragraph; at page 36, third paragraph to page 37, first paragraph; at page 38, second paragraph to page 41, first paragraph; and Claim 1 at page 47. Twardowski, Pinnow and Heitschel et al., all of record in this application, all show programming of transmitter codes for various devices such as garage door openers and the like, although not in a vehicle security system as recited in the claims. See also U.S. Patent 4,754,255. Accordingly, the specification teaches one skilled in the art to make and use the claimed invention without undue experimentation.

Claims 30, 31, 35, 55, 56, 58, 59 and 60.

Claims 30 and 55 are supported by the specification at page 14, first paragraph, at page 36, third paragraph to page 37, at page 39, first paragraph to page 42, first paragraph.

Claims 31 and 56 find support at page 32, first paragraph of the specification.

Claims 31 and 58 find support at page 14, first paragraph, at page 36, third paragraph, to page 37, at page 39, first paragraph, to page 41, first paragraph, and at page 42, first paragraph, of the specification.

Claim 35 find support in FIG. 2, and at page 39, last paragraph, to page 41, first paragraph, of the specification.

Claim 59 finds support in FIG. 2 of the specification.

Claim 60 finds support at page 26, first paragraph, and at page 42, first paragraph, of the specification.

In view of the support in the specification for features of these claims, and the level of skill in the art as exemplified by U.S. Patents 4,754,255 and 4,383,242, the specification enables one skilled in the art to make and use the claimed invention.

Rejection of the Claims on Prior Art.

Claims 29, 30, 31, 33, 35, 37, 44, 53, 54, 58, 60 and 61 stand rejected under 35 USC 102(e) as being anticipated by Heitschel et al.

Claim 32 stands rejected under USC 103 as being unpatentable over Heitschel et al. alone or in view of Twardowski.

Claims 38-43, 49, 51, 52, 55-57, and 59 stand rejected under 35 USC 103 as being unpatentable over Heitschel et al. alone or in view of Twardowski and Pinnow.

The foregoing amendments to the claims have mooted the outstanding rejections to the claims. All pending claims are now drawn to a vehicle security system which comprises vehicle antitheft means, and wherein the controller comprises means for arming or disarming the vehicle antitheft means. The pending claims are allowable over the art of record.

Heitschel et al. discloses a garage door opener system, and does not teach or suggest a vehicle security system which includes vehicle antitheft means or a controller comprising means for arming or disarming the vehicle antitheft means.

A further distinguishing characteristic of Heitschel et al. is in the manner of programming the different transmitter codes. To program a particular transmitter code, the user must not only actuate switch 22 to place the unit in the program mode, but must also manually operate memory position switch 23 to a particular one of

positions 1 to 5 to allow the code to be stored. This requirement for a memory selector switch 23 adds to the expense of the system, and results in additional steps to be performed by the system operator to program the transmitter code.

In contrast, the claimed vehicle security system includes a programming means activated only during the system program mode for automatically storing in memory the signals representative of the received transmitter code. Thus, once the system has been put into the program mode, the programming of a transmitter code into the control unit memory occurs automatically upon the transmission of the code, and does not require further manual acts or intervention by the system user. This simplifies the circuitry, and as well the programming procedure.

Twardowski does not teach or disclose a vehicle security system having vehicle antitheft means or a controller for arming or disarming the vehicle antitheft means. Pinnow discloses a door locking system which may be used in a vehicle, but is distinguished from the invention for the reasons discussed in the amendment filed April 25, 1988.

With regard to paragraph 15 of the office action, Heitschel does not disclose delayed termination of the program mode. Instead, switch 22 is manually operated to either the "operate" or the "program" position. In order for a claimed invention to be rendered obvious in view of one or more references under 35 USC 103, there must be some suggestion in the reference to make the claimed combination, and each element of the claimed invention its equivalent must be found in the combined references. Here, Heitschel et al. does not provide the teaching of delayed program mode termination. One skilled in the art must have the teaching, supplied only by applicant's specification, to add the delayed program mode termination

feature. Accordingly the rejection of Claim 32 (and Claims 49 and 57) should be withdrawn.

With regard to the rejection of Claims 38-43 and 55-61 set forth in paragraph 19 of the office action, it is submitted that the foregoing amendments to the claims have mooted this rejection. In particular, the meaning of "arming/disarming" as used in the claims is believed definite to one skilled in the art.

With respect to Paragraph 20-23 of the Office Action, it is submitted that the rejection of Claims 38-43, 55-57 and 59 based on Heitschel et al. alone or in view of Twardowski or Pinnow should be withdrawn. These references do not teach a vehicle security system as set forth in these claims, as described above. None of the cited references appear to disclose a system which is responsive to either an N bit code or an M bit code for arming or disarming a vehicle antitheft means.

The Office's reliance on Twardowski and Pinnow regarding "time delay control in the operating mode" is not understood. Neither reference appear to disclose the feature of Claim 42. Clarification of this application is requested.

New Claims 62 and 63.

The new Claims 62 and 63 depend from Claim 54. These claims are considered allowable since each depends from an allowable base claim.

Information Disclosure Statement

The Office's attention is drawn to the application filed November 30, 1988, serial no. 07/277,959, by applicant, amended to claim the benefit, as a continuation-in-part application, of the filing date of this application.

Conclusion

In view of the foregoing amendments and remarks, it is submitted that the outstanding rejections should be withdrawn.

Respectfully submitted,

January 26, 1989

Larry K. Roberts
Registration No. 28,464

Roberts and Quiogue
A Law Corporation
660 Newport Center Drive
Suite 1400
Newport Beach, CA   92660
(714) 640-6200

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner of Patents and Trademarks, Washington D.C. 20231, on _1-26-89_

Larry K. Roberts